



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,915	04/24/2001	Dan Alan Preston	9032-5	7567

7590 11/17/2005

MARGER JOHNSON & McCOLLOM, P.C.
1030 SW Morrison Street
Portland, OR 97205

EXAMINER

NGUYEN, PHUONGCHAU BA

ART UNIT	PAPER NUMBER
----------	--------------

2665

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/841,915

Applicant(s)

PRESTON ET AL.

Examiner

Phuongchau Ba Nguyen

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-18 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 19-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-18 and 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections – 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11–18, 29–32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shuman (6,616,071) in view of Stuempfle (6,505,100).

Regarding claim 11,

Shuman (6,616,071) discloses a multiprocessing system for an automobile, comprising:

multiple processors (202, 204–fig.2) that run different automobile applications;

multiple links (arrow links) that couple the multiple processors together;
and

a dynamic configuration system (network processor 100–fig.2) operating in at least some of the multiple processors that automatically incorporates new devices into the multiprocessing system (col.27, line 32–col.28, line 5).

Shuman does not explicitly disclose automatically reconfigures the multiprocessor system in real–time to run the automobile applications on different processors in the multiprocessing system .

However, in the same field of endeavor Stuempfle (6,505,100) discloses automatically reconfigures the multiprocessor system in real–time to run the automobile applications on different processors in the multiprocessing system (col.3, lines 39–53). Therefore, it would have been obvious to an artisan to apply Stuempfle's teaching to Shuman's system with the motivation being to allow the vehicle related system to be equipped with a general data processing platform, which allows flexible reloading of further executable vehicle related application at any time during the life of vehicle, while allowing optimized cost reaction by service implementation to variable external condition.

Regarding claim 12,

Shuman further discloses wherein the dynamic configuration system includes a device manager (vehicle user device manager 270) that detects signals generated by new devices and incorporates the new devices into the multiprocessor system when the signals conform a protocol used between the multiple processors (col.24, line 56–col.25, line 32).

Regarding claim 13,

Shuman further discloses wherein the dynamic configuration system includes a configuration manager that tracks the different applications operating in the different processors and automatically reconfigures the multiprocessing system to run failed applications on different ones of the multiple processors (col.1, lines 59–61).

Regarding claim 14,

Shuman discloses including storing a copy of the application that has failed and downloading and running the stored copy of the application to

Art Unit: 2665

another processor when the failure is detected (col.1, lines 59-61, col.25, lines 34-55).

Regarding claim 15,

Shuman discloses including storing critical data generated by the failed application and downloading and running the stored critical data along with the copy of the application on another processor (col.1, lines 59-61, col.25, lines 34-55).

Regarding claim 16,

Shuman discloses including displaying applications that have failed and then displaying applications in the other processors that can be replaced with copies of the failed applications (col.1, lines 59-61, col.25, lines 34-55, col.26, lines 15-41).

Regarding claim 17,

Shuman discloses including identifying types of data transferred by different devices in the multiprocessing system and displaying the different devices in the multiprocessing system that can output the identified types of data (col.1, lines 59–61, col.25, lines 34–55, col.26, lines 15–41).

Regarding claim 18,

Shuman discloses including performing the following applications with the multiprocessor system: automatic brake control; audio player control; video player control; airbag deployment monitoring; display control; navigation control; and sensor monitoring (col.9, lines 22–40).

Regarding claim 29,

Shuman (6,161,071) discloses a multiprocessor system used in a car, comprising;

multiple processors (202, 204) adapted to run different real-time car applications;

different communication links (arrow links) coupling the multiple processors together; and

a dynamic configuration system (network processor 100-fig.2) run on the multiple processors that includes a device manager (communication manager 260) for automatically detecting and adding new devices to the multiprocessor system (col.27, line 32-col.28, line 5), and a data manager (vehicle user device manager 270) that identifies data generated by the new devices and identifies other devices in the multiprocessor system that can input or output the identified data (col.24, line 56-col.25, line 32)

Shuman does not explicitly disclose a configuration manager that automatically reconfigures the multiprocessor system to run the real-time car applications on different ones of the multiple processors.

However, in the same field of endeavor Stuempfle (6,505,100) discloses a configuration manager that automatically reconfigures the multiprocessor system to run the real-time car applications on different ones of the multiple processors (col.3, lines 39-53). Therefore, it would have been obvious to an artisan to apply Stuempfle's teaching to Shuman's system with the motivation

being to allow the vehicle related system to be equipped with a general data processing platform, which allows flexible reloading of further executable vehicle related application at any time during the life of vehicle, while allowing optimized cost reaction by service implementation to variable external condition.

Regarding claim 30,

Shuman further discloses wherein the real-time car applications include any of the following: car braking; audio control; video control; car sensor monitoring; car display control; car security monitoring; car temperature control; car lighting control; and car airbag monitoring (col.1, lines 23–26).

Regarding claim 31,

Shuman discloses wherein the different communication links include a IEEE 802.11 link, a blue tooth link, and a packet based hardwired link, a satcom link, and a cellular link (col.5, lines 30–37).

Regarding claim 32,

Shuman discloses including memory (220) for storing: a list of the applications running in the multiprocessor; backup copies of selected applications running on the multiple processors; and data generated by some of the applications (col.9, lines 22-40).

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 571-272-3148. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phuongchau Ba Nguyen
Examiner
Art Unit 2665

DUCHO
PRIMARY EXAMINER



11-14-05